Listing of the Claims

1. (Currently Amended) A method for reducing background fluorescence from particulates in a solution, comprising the steps of:

(i) labeling one or more cells in [[a]] the solution with a fluorescent agent which is permeant to said one or more cells and capable of producing a fluorescence emission; and

(ii) contacting said solution and particulates with a chemical agent which is impermeant to said one or more cells,

wherein the chemical agent chemically modifies particulate extracellular fluorescent agent in said solution such that the fluorescence emission produced from said solution and particulates, after subtracting the fluorescence emission produced from said one or more labeled cells, is reduced by at least 10%.

2. (Currently Amended) A method for reducing background fluorescence from particulates in a solution, comprising the steps of:

(i) labeling one or more cells in [[a]] the solution with a fluorescent agent which is permeant to said one or more cells and capable of producing a fluorescence emission; and

(ii) contacting said solution and particulates with Acid Black 48,

wherein the fluorescence emission produced from said solution and particulates, after subtracting the fluorescence emission produced from said one or more labeled cells, is reduced by at least 10% compared to before said contacting.

3. (Original) The method according to claim 2, further comprising the steps of introducing said solution into a flow cytometer and detecting said one or more cells.

4. (Currently Amended) An aqueous sample, comprising:

(i) one or more cells labeled with a fluorescent agent which is permeant to said one or more cells and capable of producing a fluorescence emission; and

(ii) a chemical agent which is impermeant to said one or more cells and can chemically modify the fluorescent agent in the aqueous sample, including fluorescent agent associated with particulates, wherein the fluorescence emission from the aqueous sample, including the particulates, after subtracting the fluorescence emission from said one or more cells, is reduced by at least 10% when the chemical agent is present in the aqueous sample as compared to when the chemical agent is not present in the aqueous sample.

5. (Currently Amended) An aqueous sample, comprising:

(i) one or more cells labeled with a fluorescent agent which is permeant to said one or more cells and capable of producing a fluorescence emission, the aqueous sample having particulates and fluorescent agent associated with the particulates; and

(ii) Acid Black 48,

wherein the fluorescence emission from the aqueous sample, including the particulates, after subtracting the fluorescence emission from said one or more cells, is reduced by at least 10% when Acid Black 48 is present in the aqueous sample as compared when Acid Black 48 is not present in the aqueous sample.

6. (New) The method of claim 1, wherein the particulates comprise mineral particulates.

7. (New) The method of claim 1, wherein the chemical agent comprises Acid Black 48.

8. (New) The method of claim 1, wherein the fluorescent agent comprises a nucleic acid probe.

9. (New) The method of claim 2, wherein the particulates comprise mineral particulates.

10. (New) The method of claim 2, wherein the fluorescent agent comprises a nucleic acid probe.

11. (New) The aqueous sample of claim 4, wherein the particulates comprise mineral particulates.

12. (New) The aqueous sample of claim 4, wherein the chemical agent comprises Acid Black 48.

13. (New) The aqueous sample of claim 4, wherein the fluorescent agent comprises a nucleic acid probe.

14. (New) The aqueous sample of claim 5, wherein the particulates comprise mineral particulates.

15. (New) The aqueous sample of claim 5, wherein the fluorescent agent comprises a nucleic acid probe.